

ABSTRACT

The present invention is directed to an electrical connector that attaches a fuel injector assembly to a vehicle control assembly. The electrical connector comprises a plastic molded body having two integrally formed portions, a base portion and a stem portion, and an electrical contact extending through the body from the stem portion to the base portion. The base is inserted into the fuel injector assembly with the electrical contact engaging a corresponding contact within the fuel injector assembly. Similarly, the electrical contact in the stem portion of the connector is attached to a corresponding contact of a control assembly, which provides the electrical signals to operate the fuel injector. The base portion includes a metallic sleeve that extends between its sidewalls and cooperates with a locking pin that is inserted through openings in the fuel injector assembly to lock the two components together. The sleeve openings are slightly offset from the fuel injector assembly openings so that when the locking pin is inserted, it aligns the two components and urges the electrical connector further into the fuel injector assembly. Additionally, the sides of the connector include deformable “crush pads” that when inserted into the fuel injector assembly are reshaped to provide a “snug” fit between the electrical connector and the fuel injector assembly.